

Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

Laboratory Job ID: 480-153215-1

Client Project/Site: NPDES Dry Weather

For:

Solutia Inc.
730 Worcester Street
PO BOX 51975
Springfield, Massachusetts 01151

Attn: Andrew Orciari

Authorized for release by: 6/4/2019 6:06:32 PM

Steve Hartmann, Project Manager I

(413)572-4000

steve.hartmann@testamericainc.com

····· Links ······

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

_1

2

5

6

g R

9

10

11

Client: Solutia Inc. Project/Site: NPDES Dry Weather Laboratory Job ID: 480-153215-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Lab Chronicle	7
Certification Summary	8
Method Summary	9
Sample Summary	10
Subcontract Data	11
Receipt Checklists	26
Chain of Custody	27

Definitions/Glossary

Client: Solutia Inc. Job ID: 480-153215-1

Project/Site: NPDES Dry Weather

Glossary

RL

RPD

TEF

TEQ

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Relative Percent Difference, a measure of the relative difference between two points

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

3

A

5

6

9

10

11

Case Narrative

Client: Solutia Inc.

Job ID: 480-153215-1 Project/Site: NPDES Dry Weather

Job ID: 480-153215-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-153215-1

Comments

No additional comments.

Receipt

The sample was received on 5/9/2019 5:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Project/Site: NPDES Dry Weather

Client Sample ID: OF 21S

Date Collected: 05/07/19 13:25 Date Received: 05/09/19 05:00

Surrogate

Analyte

Copper

Zinc

2-Hexanone

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 480-153215-1

Matrix: Water

ND ND ND ND ND ND		1.0 1.0 1.0 1.0		ug/L ug/L ug/L ug/L			05/09/19 18:26 05/09/19 18:26	1
ND ND ND ND		1.0 1.0 1.0		ug/L				•
ND ND ND		1.0 1.0					05/00/40 40 00	
ND ND ND		1.0		ua/L			05/09/19 18:26	1
ND ND				·· 3· –			05/09/19 18:26	1
ND				ug/L			05/09/19 18:26	1
		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		5.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		2.0		ug/L			05/09/19 18:26	1
ND		2.0		ug/L			05/09/19 18:26	1
4.3		1.0		ug/L			05/09/19 18:26	1
ND		2.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		5.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
ND		1.0		ug/L			05/09/19 18:26	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
105		60 - 140			=		05/09/19 18:26	1
104		60 - 140					05/09/19 18:26	1
101		60 - 140					05/09/19 18:26	1
104		60 - 140					05/09/19 18:26	
ed Organic Com	pounds - D	irect Injection ((GC)					
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND N	ND N	ND 1.0 ND 2.0 ND 2.0 ND 2.0 ND 1.0 ND	ND	ND	ND	ND	ND

Eurofins TestAmerica, Buffalo

Analyzed

05/13/19 13:49

Analyzed

05/16/19 15:07

05/16/19 15:07

Prepared

Prepared

05/14/19 07:56

05/14/19 07:56

D

Page 5 of 29

Limits

62 - 129

RL

0.010

0.010

MDL Unit

mg/L

mg/L

%Recovery Qualifier

Result Qualifier

112

ND

ND

Dil Fac

Dil Fac

6/4/2019

Client Sample Results

Client: Solutia Inc. Job ID: 480-153215-1

Project/Site: NPDES Dry Weather

Client Sample ID: OF 21S Lab Sample ID: 480-153215-1 Date Collected: 05/07/19 13:25

Matrix: Water

Date Received: 05/09/19 05:00

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L			05/19/19 11:18	05/20/19 13:28	1

Lab Chronicle

Client: Solutia Inc. Job ID: 480-153215-1

Project/Site: NPDES Dry Weather

Client Sample ID: OF 21S

Lab Sample ID: 480-153215-1

Matrix: Water

Date Collected: 05/07/19 13:25 Date Received: 05/09/19 05:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	593878	05/09/19 18:26	RP	TAL NSH
Total/NA	Analysis	8015B		1	472478	05/13/19 13:49	MAN	TAL BUF
Total/NA	Prep	200.7			472642	05/14/19 07:56	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	475612	05/16/19 15:07	LMH	TAL BUF
Total/NA	Prep	Distill/CN			473584	05/19/19 11:18	AJL	TAL BUF
Total/NA	Analysis	335.4		1	473752	05/20/19 13:28	MDL	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

6

0

9

10

11

Accreditation/Certification Summary

Client: Solutia Inc. Job ID: 480-153215-1

Project/Site: NPDES Dry Weather

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

uthority	Program	Program State Program		EPA Region Identification Number	
assachusetts	State Prog			M-NY044	06-30-19 *
	are included in this report, bu	t the laboratory is not o	ertified by the governing	ng authority. This list may ind	clude analytes for which
The following analytes the agency does not of Analysis Method	•	t the laboratory is not o	ertified by the governii Analyi		clude analytes for whic

Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-20
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-19
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-19
lowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19 *
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-20
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins TestAmerica, Buffalo

Page 8 of 29 6/4/2019

3

7

0

9

1 1

Method Summary

Client: Solutia Inc. Job ID: 480-153215-1

Project/Site: NPDES Dry Weather

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL NSH
8015B	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
Subcontract	608.3 PCB - Contest	None	TAL BUF
200.7	Preparation, Total Metals	EPA	TAL BUF
Distill/CN	Distillation, Cyanide	None	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

-153215-1

3

4

5

7

8

9

10

11

Sample Summary

Client: Solutia Inc.

Project/Site: NPDES Dry Weather

Job ID: 480-153215-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-153215-1	OF 21S	Water	05/07/19 13:25	05/09/19 05:00	

3

4

0

9

10

SUBCONTRACTED DATA



May 17, 2019

Steve Hartman Test America - Westfield 501 Southampton Road, Suite C Westfield, MA 01085

Project Location: 480-153215

Client Job Number:

Project Number: 480-153215

Laboratory Work Order Number: 19E0551

Keny K. Mille

Enclosed are results of analyses for samples received by the laboratory on May 9, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kerry K. McGee Project Manager

> Page 1 of 14 8/4/2019

Table of Contents

Sample Summary	3
Case Narrative	4
Sample Results	5
19E0551-01	5
Sample Preparation Information	6
QC Data	7
Polychlorinated Biphenyls By GC/ECD	7
B230556	7
Dual Column RPD Report	8
Flag/Qualifier Summary	11
Certifications	12
Chain of Custody/Sample Receipt	13



Test America - Westfield 501 Southampton Road, Suite C Westfield, MA 01085

ATTN: Steve Hartman

PURCHASE ORDER NUMBER: 3035631

REPORT DATE: 5/17/2019

PROJECT NUMBER:

480-153215

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19E0551

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 480-153215

FIELD SAMPLE # LAB ID: MATRIX SAMPLE DESCRIPTION TEST SUB LAB

OF 21S 19E0551-01 Water 608.3



CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

na Watshirsta

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington Technical Representative





Sample Description: Work Order: 19E0551

Project Location: 480-153215 Date Received: 5/9/2019 Field Sample #: OF 21S

Sampled: 5/7/2019 13:25

Sample ID: 19E0551-01
Sample Matrix: Water

Polychlorinated	Rinhenvle	By CC/FCD
r orychior mateu	Diplienyis	by GC/ECD

								Date	Date/Time	
An	alyte Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	<0.200	0.200	0.184	μg/L	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1221 [1]	< 0.200	0.200	0.161	μg/L	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1232 [1]	< 0.200	0.200	0.199	$\mu \text{g/L}$	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1242 [1]	< 0.200	0.200	0.173	$\mu \text{g/L}$	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1248 [2]	0.252	0.200	0.190	$\mu \text{g/L}$	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1254 [1]	< 0.200	0.200	0.105	$\mu \text{g}/L$	1		608.3	5/13/19	5/16/19 17:48	JMB
Aroclor-1260 [1]	<0.200	0.200	0.196	$\mu g/L$	1		608.3	5/13/19	5/16/19 17:48	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	84.7	30-150		5/16/19 17:48
Decachlorobiphenyl [2]	82.6	30-150		5/16/19 17:48
Tetrachloro-m-xylene [1]	95.0	30-150		5/16/19 17:48
Tetrachloro-m-xylene [2]	90.7	30-150		5/16/19 17:48

5

7

9

10

11



Sample Extraction Data

Prep Method: SW-846 3510C-608.3

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
19E0551-01 [OF 21S]	B230556	1000	10.0	05/13/19

2

- 0

9

10

11

Surrogate: Decachlorobiphenyl [2C]

Surrogate: Tetrachloro-m-xylene [2C]

Surrogate: Tetrachloro-m-xylene

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B230556 - SW-846 3510C										
Blank (B230556-BLK1)				Prepared: 05	5/13/19 Anal	yzed: 05/14/1	.9			
Aroclor-1016	ND	0.100	μg/L							
Aroclor-1016 [2C]	ND	0.100	μg/L							
Aroclor-1221	ND	0.100	μg/L							
Aroclor-1221 [2C]	ND	0.100	μg/L							
Aroclor-1232	ND	0.100	μg/L							
Aroclor-1232 [2C]	ND	0.100	μg/L							
Aroclor-1242	ND	0.100	μg/L							
Aroclor-1242 [2C]	ND	0.100	μg/L							
Aroclor-1248	ND	0.100	μg/L							
Aroclor-1248 [2C]	ND	0.100	$\mu g/L$							
Aroclor-1254	ND	0.100	$\mu g/L$							
Aroclor-1254 [2C]	ND	0.100	μg/L							
Aroclor-1260	ND	0.100	μg/L							
Aroclor-1260 [2C]	ND	0.100	μg/L							
Surrogate: Decachlorobiphenyl	0.996		μg/L	1.00		99.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.965		$\mu g/L$	1.00		96.5	30-150			
Surrogate: Tetrachloro-m-xylene	1.02		$\mu g/L$	1.00		102	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	1.00		$\mu g/L$	1.00		100	30-150			
LCS (B230556-BS1)				Prepared: 05	7/13/19 Anal	yzed: 05/14/1	9			
Aroclor-1016	0.733	0.333	μg/L	0.833		87.9	50-140			
Aroclor-1016 [2C]	0.699	0.333	$\mu g/L$	0.833		83.9	50-140			
Aroclor-1260	0.690	0.333	$\mu g/L$	0.833		82.8	8-140			
Aroclor-1260 [2C]	0.703	0.333	$\mu g/L$	0.833		84.4	8-140			
Surrogate: Decachlorobiphenyl	2.66		μg/L	3.33		79.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	2.57		$\mu g/L$	3.33		77.0	30-150			
Surrogate: Tetrachloro-m-xylene	2.69		$\mu g/L$	3.33		80.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	2.61		$\mu \text{g}/L$	3.33		78.3	30-150			
LCS Dup (B230556-BSD1)				Prepared: 05	5/13/19 Anal	yzed: 05/14/1	.9			
Aroclor-1016	0.694	0.333	μg/L	0.833		83.2	50-140	5.48		
Aroclor-1016 [2C]	0.689	0.333	$\mu g/L$	0.833		82.7	50-140	1.50		
Aroclor-1260	0.683	0.333	$\mu g/L$	0.833		82.0	8-140	0.998		
Aroclor-1260 [2C]	0.687	0.333	$\mu g/L$	0.833		82.4	8-140	2.43		
Surrogate: Decachlorobiphenyl	2.48		μg/L	3.33		74.4	30-150			

2.40

2.57

2.50

3.33

3.33

3.33

 $\mu g/L$

 $\mu g/L$

 $\mu g/L$

72.1

77.1

74.9

30-150

30-150

30-150



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

OF 21S

608.3

Lab Sample ID:	19E0551-01		Date(s) Analyzed:	05/16/2019	05/16	6/2019
Instrument ID (1):	ECD 9	_	Instrument ID (2):	ECD 9		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7.117.2112		111	FROM	TO	00110211111111111111	701 11 12
Aroclor-1248	1	0.000	0.000	0.000	0.270	
	2	0.000	0.000	0.000	0.252	6.9

3

4

5

6

0

10

44



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS

608.3

Lab Sample ID:	B230556-BS1	_	Date(s) Analyzed:	05/14/2019	05/14	/2019
Instrument ID (1):	ECD 9		Instrument ID (2):	ECD 9		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD	
7	002		FROM	TO	001102111111111111111	701 11 2	
Aroclor-1016	1	0.000	0.000	0.000	0.733		
	2	0.000	0.000	0.000	0.699	4.3	
Aroclor-1260	1	0.000	0.000	0.000	0.690		
	2	0.000	0.000	0.000	0.703	1.9	

6

8

4.0



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

608.3

Lab Sample ID:	B230556-BSD1	<u> </u>	Date(s) Analyzed:	05/14/2019	05/14/2	019
Instrument ID (1):	ECD 9		Instrument ID (2):	ECD 9		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7.1.7.12.1.2	002		FROM	TO	001102111111111111111111111111111111111	701 11 2
Aroclor-1016	1	0.000	0.000	0.000	0.694	
	2	0.000	0.000	0.000	0.689	0.1
Aroclor-1260	1	0.000	0.000	0.000	0.683	
	2	0.000	0.000	0.000	0.687	1.0

Page 10 of 14 6/4/2019





DL

MCL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

Detection Limit is the lower limit of detection determined by the MDL study

Maximum Contaminant Level

Page 11 of 14 6/4/2019





CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
608.3 in Water	
Aroclor-1016	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1016 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1221 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1232 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1242 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1248 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1254 [2C]	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260	CT,MA,NH,NY,RI,NC,ME,VA
Aroclor-1260 [2C]	CT,MA,NH,NY,RI,NC,ME,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Publile Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2019
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2019

6

8

4.0

1 0

11

Eurofins TestAmerica Westfield						J.	196055	M	10				r		:	*	
501 Southampton Road Suite C			Ö	Chain of Custody Record	Ö	stoc	<u>></u>	eco	Ō							0	
Westfield, MA 01085 Phone (413) 572-4000 Fax (413) 572-3707						•	,							WE LEADER I	THE LEADER IN ENVIRONMENTAL TESTING	AL TESTING	
Client Information	Sampler: Andrew Orciari			Lab PW:						Carrier T	Carrier Tracking No(s)	(s):	<u>ŏ</u>	COC No:			
	Phone:	***************************************		E-Mail:						T			<u>Iď</u>	Page:			1
Company: Eurofins TestAmerica Laboratories								Analy	is Re	Analysis Requested			of.	Job #:			T
Address: 501 Southampton Road Suite C	Due Date Requested:	<u></u>												Preservation Codes A - HCL	Codes: J - DI Water	ţe.	r
City: Westfield	TAT Requested (days):	rs):											<u> </u>	B - NaOH C - Zn Acetate		្ត	
State, Zip: MA, 01085													<u> </u>	D - Nitric Acid E - NaHSO4		S &	
00	Quote #:												<u> </u>	F - MeOH H - Ascorbic Acid	R - Na2S2SO3 Acid S - H2SO4	SO3 -	
)testamericainc.com	PO#													I - Ice Z - ott	Z - other (specify)	specify)	- I
ct Namerhumber:	#OM				્ ક									MCP CP	GWI/SI		
Site:	SSOW#:					I2D3								DEP Form	☐ EDD Required		
Pa		63	Sample Type (C=comp,	Matrix (W=water, S=solid, O=waste/olf,	jini a'nəlqmı bərətlif ble	8 PCB MS/M							ted Number				1
Sample identification	Sample Date	Time	2777	(Jawa)	- Carl	- A							ਗ >	Specia	Special Instructions/Note	/Note:	
		1	OTHER DESIGNATION OF THE PERSON OF THE PERSO		才	1							4				
OF 21S CS	5/7/19	1325	ပ	3													
29																	· I
			***************************************		4												T
						-		_									
						-	1		1	1							
						-										THE STATE OF THE S	
																	1
						H											T
					Sam	ple Dis	sposal ('A fee	nay be	assesse	if sam	oles are	retained	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	1 month)		<u> </u>
Non-Hazard Flammable Skin Irritant Poison B	on B Unknown		Radiological		- 6	Retur	Return To Client Disp	ient		Disposal By Lab	ByLab	1	Archive For	For	Months		- 1
Deliverable Nequesiau. 1, 11, 11, VIII et (specify)) Object		ructions	3	dalle	- 1			,				
uished by:	Date/Time:	<i>\$44.</i>		Company TAL Company		Received by:		7		47	\$ 0	Date/Time:	6/10	144	CCTCOMPANY ST	92	Tab
	Date/Time:		Ŏ	Company		Received by	Ď.	MANAGEN.			<u> </u>	Date/Time:			Company		le of
]									Со
Stody Seals Infact: Custody Seal No.:					Ĭ.	Cooler Te	Cooler Temperature(s) °C and Other Remarks:	re(s) °C all	d Other F	emarks:							nter
WI-QA-010-rev 6									11	10	8	7		5	3	1	nts
									' 1	1							

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples_____

(50)		te:	5C°
ANALYT	ICAL LA	ABORA	TORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False	
Statement will be brought to the attention of the Client - State True or False	

Received By How were the samples In Cooler Tooler No Cooler On Ice Tooler No Ice	
Temperature? 2-6°C	
Were samples within Temperature? 2-6°C By Blank # Actual Temp - Was Custody Seal Intact? Was COC Relinquished? Are there broken/leaking/loose caps on any samples? Did COC include all Pertinent Information? Are Sample labels filled out and legible? Are there Rushes? Are there Short Holds? By Gun # Actual Temp - Actual Temp	
Were samples within Temperature? 2-6°C Was Custody Seal Intact? Was COC Relinquished? Are there broken/leaking/loose caps on any samples? Did COC in ink/ Legible? Did COC include all Pertinent Information? Are Sample labels filled out and legible? Are there Lab to Filters? Are there Short Holds? By Blank # Actual Temp - A	
Temperature? 2-6°C	
Was Custody Seal Intact? Was COC Relinquished? Are there broken/leaking/loose caps on any samples? Is COC in ink/ Legible? Did COC include all Pertinent Information? Are Sample labels filled out and legible? Are there Lab to Filters? Are there Rushes? Are there Short Holds? Were Samples Tampered with? Does Chain Agree With Samples? Were samples received within holding time? Analysis Tampered with? Analysis Tampered with? Analysis Tampered with? Were Samples? Were samples received within holding time? In Did COC include all Tanalysis Tampered with? Were Samples Tampered withs? Were Samples Tampered withs and selection Tampered with selection Tampered with selection Tampered	
Was COC Relinquished? Are there broken/leaking/loose caps on any samples? Is COC in ink/ Legible? Did COC include all Client pertinent Information? Are Sample labels filled out and legible? Are there Lab to Filters? Are there Rushes? Are there Short Holds? Does Chain Agree With Samples? Were samples received within holding time? Analysis T Analysis T Collection Dates/Times T Who was notified? Who was notified? Who was notified? Who was notified?	
Are there broken/leaking/loose caps on any samples? Is COC in ink/ Legible? Did COC include all Client pertinent Information? Project Are Sample labels filled out and legible? Are there Lab to Filters? Are there Rushes? Are there Short Holds? F Were samples received within holding time? Analysis T Analysis T Collection Dates/Times T Who was notified? Who was notified? Who was notified? Who was notified?	
SCOC in ink/ Legible? T Were samples received within holding time? Name T	
Did COC include all Client T Analysis T Sampler Name T ID's Collection Dates/Times T Are Sample labels filled out and legible? Are there Lab to Filters? Are there Rushes? Are there Short Holds? Analysis T Sampler Name T Collection Dates/Times T Who was notified? Who was notified? Who was notified? Who was notified?	
pertinent Information? Project T ID's T Collection Dates/Times T Are Sample labels filled out and legible? T Are there Lab to Filters? F Who was notified? Are there Rushes? F Who was notified? Are there Short Holds? F Who was notified?	
Are there Lab to Filters? Are there Rushes? Are there Short Holds? Who was notified? Who was notified? Who was notified?	
Are there Rushes?	
Are there Short Holds? Who was notified?	
ls there enough Volume?	
Is there Headspace where applicable? MS/MSD? — MS/MSD?	
Proper Media/Containers Used? Is splitting samples required? ———————————————————————————————————	
Were trip blanks received? — — On COC? — —	
Do all samples have the proper pH? Acid <u>AR</u> Base <u>MA</u>	
Vials # Containers: # #	#
Unp- 1 Liter Amb. 2 1 Liter Plastic 16 oz Amb.	
HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear	
Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear	
Bisulfate- Flashpoint Col./Bacteria 2oz Amb/Clear DI- Other Glass Other Plastic Encore	
Thiosulfate- SOC Kit Plastic Bag Frozen: Sulfuric- Perchlorate Ziplock	
	1
Unused Media Vials # Containers: # #	# 1
	T.
7/MIC	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb.	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear Bisulfate- Col./Bacteria Flashpoint 2oz Amb/Clear	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear Bisulfate- Col./Bacteria Flashpoint 2oz Amb/Clear DI- Other Plastic Other Glass Encore	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear Bisulfate- Col./Bacteria Flashpoint 2oz Amb/Clear DI- Other Plastic Other Glass Encore Thiosulfate- SOC Kit Plastic Bag Frozen:	
Unp- 1 Liter Amb. 1 Liter Plastic 16 oz Amb. HCL- 500 mL Amb. 500 mL Plastic 8oz Amb/Clear Meoh- 250 mL Amb. 250 mL Plastic 4oz Amb/Clear Bisulfate- Col./Bacteria Flashpoint 2oz Amb/Clear DI- Other Plastic Other Glass Encore	

Client: Solutia Inc.

Job Number: 480-153215-1

Login Number: 153215 List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Velickovic, Zoran

ordator. Venekovie, Zoran		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
/OA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
f necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Solutia
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Eurofins TestAmerica, Buffalo

12

P - Na2O4S
Q - Na2SO3
R - Na2SO3
R - Na2SO4
T - TSP Dodecahydrate
U - Acetone
U - Acetone
W - pH 4-5
Z - other (specify) ca-Test 624 - Mashuille Special Instructions/Note: Months отрапу Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 7 480-128984-22789.1 Preservation Codes 020 A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NanSOA F - MeOH G - Amchlor H - Ascorbic Acid GO8. PCB Page 1 of 1 Job #: 0/60 I - Ice J - DI Water K - EDTA L - EDA Archive For # Total Number of containers 60 Carrier Tracking No(s): EN Method of Shipment 0 Disposal By Lab Analysis Requested Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: 480-153215 Chain of Custody steve.hartmann@testamericainc.com lonsitisM - IAG_B2108 35.4 - Cyanide, Total Received by: Lab PM: Hartmann, Steve E-Mait: 200.7 - Copper & Zinc MS/MSD (Yes or No) Time: 2:15pm SolutiA (W=water, S=solid, O=waste/oil, Preservation Code: Matrix Water CACIAR Radiological (C=comp, G=grab) 730-3291 Sample Type 0 1:25pm Sample Time B Hodeew 17/2019 Date: Unknown (AT Requested (days) Due Date Requested: 4.3) 5/7/19 Sample Date Oate/Time:) Project #: 48007093 S/8// 44643721 Poison B Skin Irritant Custody Seals Intact: Custody Seal No. Phone (716) 691-2600 Fax (716) 691-7991 Address: 730 Worcester Street PO BOX 51975 INC Empty Kit Relinquished by: Solut, A Client Information Sample Identification nlean@eastman.com NPDES Dry Weather 413-730-3291(Tel) Mr. Jeff Leandro uished by: iquished by: aulshed by State, Zip: MA, 01151 Solutia Inc. Springfield OF 21S

Environment Testing

🔆 eurofins

Chain of Custody Record

Eurofins TestAmerica, Buffalo

Amherst, NY 14228-2298

10 Hazelwood Drive



THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN

COOLER RECEIPT FORM



480-153215 Chain of Custod

Cooler Received/Opened On5/9/2019 @ 0940	
Time Samples Removed From Cooler 3'14 Time Samples Placed In Storage 3'18	(2 Hour Window)
1. Tracking # 4236 (last 4 digits, FedEx) Courier: FedEx	
IR Gun ID17610176 pH Strip Lot Chlorine Strip Lot	
2. Temperature of rep. sample or temp blank when opened: 518 Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO(NA
4. Were custody seals on outside of cooler?	YESO.NA
If yes, how many and where:	
5. Were the seals intact, signed, and dated correctly?	YESNO(N)
6. Were custody papers inside cooler?	regnona
I certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES (No and Intact	YESNON
Were these signed and dated correctly?	YESNON
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: Lce lce-pack lce (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags agree with custody papers?	YESNONA
13a. Were VOA vials received?	ESnona
b. Was there any observable headspace present in any VOA vial?	YESNA
Larger than this.	,
14. Was there a Trip Blank in this cooler? YES. NONA If multiple coolers, sequence	e #
I certify that I unloaded the cooler and answered questions 7-14 (intial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNONA
b. Did the bottle labels indicate that the correct preservatives were used	(FE)NONA
16. Was residual chlorine present?	YESNOINA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)	99_
17. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
18. Did you sign the custody papers in the appropriate place?	YESNONA
19. Were correct containers used for the analysis requested?	YESNONA
20. Was sufficient amount of sample sent in each container?	YE9NONA
Lertify that I entered this project into LIMS and answered questions 17-20 (intial)	70
I certify that I attached a label with the unique LIMS number to each container (intial)	8
21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #	:

Urofins Environment Testing Testing M - Hexane
N - None
O - AsNaCO3
P - Na2CO4S
Q - Na2SO3
R - Na2SO3
R - Na2SO4
T - TSP Dodecatydrate
U - Acetone Con-Test Company TA-NAS Ver. 01/16/2019 Months 6917 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client
Disposal By Lab Ŷ 128984-22789.1 OP. PrB A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NabSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid F 459 05/09/14 Page: Page 1 of 1 Job#: 09/10 I - Ice J - DI Water K - EDTA L - EDA 480-153215 Total Number of containers Date Time: Sate/Title://www. Method of Shipment: **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: dulleting Lab PNt Hartmann, Steve E-Mait: steve hartmann@testamericainc.com STO 2MI - NOC,8 lonsday - IAG_Betos Received by: Chain of Custody Record Time: 2:15pm SolutiA Company Matrix (Wewater, Sesolid, Oewastefoll, Water ORCIARI Radiological Sample Type (C=comp, 736-3291 G=grab) ٧ Sample Time 5/7/19 1:25pm Hudeew 12019 Unknown Date: AT Requested (days): Due Date Requested: 4.3) 7 Sample Date Project #: 48007093 SSOW#: Po #: 44643721 WO #: Poison B $\overline{\Box}$ Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Eurofins TestAmerica, Buffalo Custody Seals Intact: Custody Seal No.: Phone (716) 691-2600 Fax (716) 691-7991 730 Worcester Street PO BOX 51975 INC 3 ossible Hazard Identification Empty Kit Relinquished by: Amherst, NY 14228-2298 Solut in Client Information Sample Identification nlean@eastman.com VPDES Dry Weather 10 Hazelwood Drive 413-730-3291(Tel) Non-Hazard Client Contact: Mr. Jeff Leandro State, Zip: MA, 01151 Solutia Inc. Springfield **DF 21S**